

What is claimed is:

- Sub 17
1. A medical retrieval instrument comprising :
a plurality of filaments for holding an object; and
a hollow section, through which a first end of each of the plurality of filaments passes,
the hollow section including a fixing section for fixing a second end of each of the plurality
of filaments.
 2. The medical retrieval instrument according to claim 1, wherein the fixing section
comprises a positioning section at which the second ends of each of the plurality of
filaments are located, and a holding section engaged with the positioning section to hold
the plurality of filaments.
 3. The medical retrieval instrument according to claim 2, wherein the hollow section
comprises a first member including the positioning section and a second member including
the holding section.
 4. The medical retrieval instrument according to claim 3, wherein the first member
and the second member are engaged to form the fixing section.
 5. The medical retrieval instrument according to claim 4, wherein the first member is
engaged into the second member so that the first member and the second member form an
engagement surface, and wherein the fixing section is formed on the engagement surface.
 6. The medical retrieval instrument according to claim 5, wherein the first member
includes an external surface, the second member includes an internal surface, wherein the
engagement surface is formed of the external surface and the internal surface, the

positioning section is formed on one of the external surface or the internal surface, and the holding section is formed on the other of the external surface or the internal surface.

7. The medical retrieval instrument according to claim 6, wherein the first member is a tube member into which the filament is inserted, the second member includes an opening into which the first member is engaged, and the plurality of filaments are inserted into the second member.

8. The medical retrieval instrument according to claim 4, wherein the second member is engaged into the first member so that the first member and the second member form an engage surface, and the fixing section is formed on the engagement surface.

9. The medical retrieval instrument according to claim 8, wherein the first member includes an internal surface, the second member includes an external surface, the engagement surface is formed of the internal surface and the external surface, the positioning section is formed on one of the internal surface or the external surface, and the holding section is formed on the other of the external surface or the internal surface.

10. The medical retrieval instrument according to claim 9, wherein the first member is a tube, the second member is engaged into the inner side of the tube, and the plurality of filaments are inserted into the second member.

11. The medical retrieval instrument according to claim 1, further comprising :
an operation section for moving the filaments forward and backward, the operation section being operatively coupled to the first end of each of the plurality of filaments.

12. The medical retrieval instrument according to claim 11, further comprising :
an insertion section by which the plurality of filaments are inserted into the body cavity, a
first end portion of the insertion section being coupled to the hollow section and a second
end portion of the insertion section being coupled to the operation section.

13. The medical retrieval instrument according to claim 1, wherein the fixing section
includes a plurality of fixing positions to fix the second end of each of the plurality of
filaments, the plurality of fixing positions being provided at equal intervals.

14. The medical retrieval instrument according to claim 1, wherein each of the
plurality of fixing positions includes a hole to fix the second end of each of the plurality of
filaments.

15. The medical retrieval instrument according to claim 1, wherein at least one of the
plurality of the filaments are formed of a material selected from a group consisting of
polyethylene terephthalate, polybutylene terephthalate, polyimide, or NiTi alloy.

16. The medical retrieval instrument according to claim 1, wherein the hollow section
comprises a first member through which one end of each of the plurality of filaments
passes, and a second member engaged with the first member, wherein the fixing section
includes a plurality of grooves formed on an engagement surface at which the first member
and the second member engage.

17. The medical retrieval instrument according to claim 16, wherein the first member
includes an internal surface and the second member includes an external surface, wherein
the plurality of grooves are formed between the internal surface and the external surface.

18. The medical retrieval instrument according to claim 17, wherein the plurality of grooves are formed on one of the internal surface or the external surface.

19. The medical retrieval instrument according to claim 16, wherein the first member includes an external surface and the second member includes an internal surface, wherein the plurality of grooves are formed between the external surface and the internal surface.

20. The medical retrieval instrument according to claim 19, wherein the plurality of grooves are formed on one of the external surface or the internal surface.

21. The medical retrieval instrument according to claim 16, wherein an elongated direction of the plurality of grooves is the same as an elongated direction of the first member or the second member.

22. The medical retrieval instrument according to claim 16, wherein an elongated direction of the plurality of grooves is slanted with respect to an extending direction of the first member or an elongated direction of the second member.

23. The medical retrieval instrument according to claim 16, further comprising :
an operation section for moving the filaments forward and backward, the operation section being operatively coupled to each of the plurality of filaments, and
an insertion section by which each of the plurality of filaments are inserted into a body cavity, the insertion section being coupled to a first end portion of the second member, and the operation section being coupled to a second end portion of the second member.

24. A medical retrieval instrument comprising:
a plurality of filaments for holding an object; and
a tube, through which a first end portion of each of the plurality of filaments passes,
the tube including holes for fixing a second end portion of each of the plurality of
filaments.
25. A medical retrieval instrument comprising:
a plurality of filaments for holding an object;
a first tube including a plurality of grooves in which a first end portion of each of the
plurality of filaments is disposed, the plurality of grooves are formed on one of an external
or internal surface of the first tube; and
a second tube engaged with the first tube for fixing the first end portion of each of the
plurality of filaments disposed in the plurality of grooves.
26. A medical retrieval instrument comprising:
a plurality of filaments for holding an object; and
a sheath, through which a first end of each of the plurality of filaments passes, the
sheath having a fixing section for fixing a second end of each of the plurality of filaments.